

## **BID SPECIFICATIONS**

### **2018 TERMINAL BUILDING STANDBY GENERATOR PROJECT**

The County of Hancock, Maine is seeking bids from qualified firms for the purchase and installation of at least a 20KW backup generator for the terminal building at the Hancock County - Bar Harbor Airport, in Trenton, Maine. Please note that the intent of this project is to have a backup power system for the County's airport terminal building that is appropriately sized for building preservation and not for full continuity of airport operations during complete power failures.

### **SUBMISSIONS**

All bids shall be submitted in writing, **on the form provided**. Bids shall be submitted in a sealed envelope clearly marked on the outside "Airport Generator Bid". All bids shall be received at the Hancock County Commissioners Office, County Court House, 50 State Street, Suite 7, Ellsworth, Maine 04605, **not later than Monday, August 6<sup>th</sup>, by 2pm**. All bids will be opened and read aloud at the August 7<sup>th</sup> monthly meeting of the Hancock County Commissioners which starts at 8:30am.

**Each bid shall be accompanied by originals of the manufactures literature including detailed manufacturer`s specifications of the model being bid.**

All bids must be in accordance with these specifications, and shall include delivery, setup, and installation of the standby generator in a specified location along with the accessories specifically referenced herein to the Hancock County - Bar Harbor Airport.

All bids shall remain in effect for 30 days from the date of bid opening.

### **SPECIFICATIONS**

#### **Generator:**

Generator to be 120/208V 3-phase 4 wire, 60 Hz, power factor of at least 0.80, 20KW continuous power capability, maximum continuous load current 69.0 amps, 3600RPM at full load.

Generator shall include "cold weather kit" including battery heater and base heater at a minimum.

Generator and Automatic Transfer Switch shall be by same manufacturer.

Generator Enclosure shall be of steel or aluminum, mounted on precast concrete with base wrap trims.

Underground conduits and propane lines shall rise out of the ground as close to the generator pad as possible. All above grade conduit risers shall be installed with expansion fittings.

**Transfer Switch:**

Automatic Transfer Switch/ controller shall be NEMA 1 or NEMA 3, 100 amps 3 phase 4 wire as manufactured by generator manufacturer. Unit shall indicate (at a minimum):

- 1) "Ready to Run" condition.
- 2) Engine Run Hours.
- 3) High Engine Temp.
- 4) Low oil pressure.
- 5) High oil temperature.
- 6) Engine overcrank.
- 7) Start Battery condition.
- 8) Internal wiring fault.
- 9) control wiring problem/fault.

In addition, ATS shall include exercise timer, battery charger circuit, and battery heater circuit and controls, manual operator for emergency transfer.

Transfer switch shall be fed with new 100A 3-pole breaker for existing panel EP1 (Cutler Hammer). Remove spare breakers to make space as necessary.

**Electrical wiring:**

Power conductors from generator to electrical terminal box on exterior of Terminal Building shall be Copper Type THWN. From Terminal box on exterior of Terminal Building to electrical vault in terminal building shall be via insulated armored aluminum cable, rated for 90 amps (#2 Alum XHHW) and for direct burial. This cable shall be installed in pre-installed spare 4" PVC conduit extended under this contract to a terminal box on NE corner of building. No aluminum conductors will be connected to generator.

Control cable from ATS to generator shall be pulled into same conduit into basement electrical vault from exterior terminal box and shall be run in one continuous length to the generator.

Control cable shall be multi-conductor, multi-rated tray or control cable, minimum conductor size of #14 awg, unless otherwise specified by Generator Manufacturer (Provide Documentation at Closeout).

For transfer switch location and attached work, please see Sketch #1.

4" PVC conduit under slab shall be extended to exterior terminal box. Exterior terminal box shall be minimum 18 x 18 x 8 PVC with gasketed, screw attached cover. Enclosed in this box shall be all control wiring (pass-thru), and UL listed terminal strip rated for CU/AL transition. See Sketch #2.

A 8ft x 5/8 grounding rod shall be driven at Generator location, and bonded to generator frame/case as well as the metallic gas piping at generator. Use UL listed ground rod and gas line clamps, #6 bare ground wire.

Interior wiring in Electrical vault shall be in EMT (steel set-screw fittings) or metal armored cables. All interior conductors shall be copper, except generator power to transfer switch.

Generator load panel shall be 100Amps, 24 ckt, 3 phase 120/208V, 10Kaic, NEMA 1 bolt-in breaker style to match existing Cutler Hammer panels. Panel shall be mounted as close to new ATS as possible.

The following circuits, all of which are present in existing panels, shall be connected to this emergency panel:

- 1) Boiler power.
- 2) Boiler make-up air fan and heat controls.
- 3) Boiler circulators.
- 4) Well pump.
- 5) Computer network equipment in Electrical room.
- 6) Electrical and mechanical room lights.
- 7) All Heating System Control Circuit(s).
- 8) One (1) receptacle circuit for electrical or mechanical room use.

**Propane related notes:**

Large propane tanks near generator installation area are owned by Hancock County Airport.

This bid shall include the complete propane hookup by a licensed technician. Tanks were installed and piped by ABS Mechanical as part of a terminal expansion project.

**Misc. Notes:**

1) The work on this project is in an area secured by TSA. Some special rules will likely apply re: Aircraft security while boarding. Keep in mind that they have a job to do as well as you. We do not anticipate any problems or added expense for compliance with security rules.

2) Other than pre-arranged generator delivery, generally no contractors' vehicles will be allowed inside fenced in area.

3) All disturbed areas will be filled, top soiled, planted to match existing. It is expected that price will include complete cleanup of inside and outside work areas.

4) Successful bidder will be responsible for any required permits and inspections. Electrical Permit is State-Issued.

5) Prior to any digging, the following entities must be notified:

A) Dig Safe.

B) Maint. Director Richard Gray.

**WARRANTY/GUARANTEE**

Manufacturer's warranty.

**SITE VISIT REQUIREMENT**

All responsible bidders must have completed a site visit with the Airport Maintenance Director prior to submitting their bids for their bids to qualify.

Any questions concerning these bid specifications should be directed to the Airport Maintenance Director, Mr. Richard Gray, at (207) 667-7432 during the hours of 7:30 AM- 4:00 PM Monday - Friday.

**CHANGE TO SPECIFICATIONS**

No verbal changes may be made to these specifications. All changes must be made in writing, and will be posted on the airport website not less than five (5) days prior to bid opening.

**PAYMENT**

Payment will be made within 30 days from the date of completed installation and successful testing of the generator unit. The County of Hancock is tax exempt and a copy of the County's permanent tax exempt certificate is available upon request.

**THE COUNTY OF HANCOCK RESERVES THE RIGHT TO  
REJECT ANY OR ALL PROPOSALS AND TO ACCEPT THE  
BID DEEMED TO BE IN THE BEST INTERESTS OF THE COUNTY**

**Hancock County - Bar Harbor Airport  
BID SUBMITTAL FORM  
2018 Terminal Building Standby Backup Generator Project**

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\_\_\_\_\_  
Print or type Company name

\_\_\_\_\_  
Company Address

\_\_\_\_\_  
Email Address

\_\_\_\_\_  
Telephone

In accordance with the bid specifications for the purchase and installation of a standby generator for the Hancock County - Bar Harbor Airport, Trenton, Maine, the above company submits the following bid.

**Total Bid Price: \$ \_\_\_\_\_**

Bid submitted by: \_\_\_\_\_  
Print or type name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date